

# TABLEAU

**A Business Intelligence tool**



# Tableau

Tableau is a visual analytical tool to present the large complex data into the readable & understandable format.

These days it is widely used by most of the business sectors as it provide great quality with ease.

Tableau can connect to 50+ data sources and gives us 24 types of charts.



# Why Tableau?

- Speed
- User Friendly
- Eye-catching and Interactive Dashboards
- Direct Connection
- Easy Publishing and Sharing
- Growing Market



# Tableau Products

- Tableau Desktop - to create the visualizations
- Tableau Public – a free version to create interactive visualizations.
- Tableau Online - cloud platform to share the visualizations.
- Tableau Server – to share the visualizations with the people in the organization
- Tableau Reader – to view visualizations created in Tableau can not edit.
- Tableau Prep – Used for cleaning the data



# Installing Tableau

(14 Days Free Trial)

- Go to Tableau.com
- Click on Try Now
- Enter your Email id
- Click on Download free trail
- Double click the downloaded file to install it.
- Fill the registration form and get started.
- <https://public.tableau.com/en-us/s/download>



# Installing Tableau

(14 Days Free Trial)

The image shows a screenshot of the Tableau Public 2022.4 installation setup window. The window title is "Tableau Public 2022.4 (2024.22.1117.1841) Setup". The main content area is titled "Welcome to Tableau" and includes the following text:

Before you install the product, you must read and accept the license agreement.  
Tableau Public 2022.4 [license terms](#).

☐ I have read and accept the terms of the license agreement.

To help improve our product, Tableau collects information about your feature usage. All usage data is handled according to our [Privacy Policy](#).

Select the check box to opt out. [Learn more](#)

☐ Don't send product usage data.

Buttons for "Customize" and "Install" are visible at the bottom of the setup window.

The background shows the Tableau Public website with the URL <https://public.tableau.com/app/resources/learn>. The page includes a "Resources" section with tabs for "Learn", "Sample Data", and "Connect". The "Learn" tab is selected, showing a "New to Tableau" section with a green checkmark and the text "Thank you for your automatic download".

At the bottom of the background image, there is a small illustration of a person in a suit holding a globe, with various icons floating around them.

# Installing Tableau

(14 Days Free Trial)





## Connect

### To a File

Excel  
Text file  
Access  
JSON file  
PDF file  
Spatial file  
Statistical file  
More...

### To a Server

Tableau Server  
Microsoft SQL Server  
MySQL  
Oracle  
Amazon Redshift  
More...

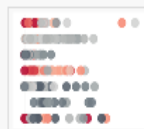
### Saved Data Sources

Sample - Superstore  
World Indicators

## Open

[Open a Workbook](#)

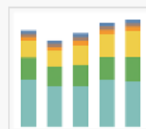
### Sample Workbooks



Superstore



Regional



World Indicators

[More Samples](#)

## Discover

### Training

Getting Started  
Connecting to Data  
Visual Analytics  
Understanding Tableau  
More training videos...

### Viz of the Week

Pedigree Of The Teams Qualified  
For World Cup 2018

### Resources

Blog - Singapore's next generation  
of data talent  
Tableau Conference - Register Now  
Forums



Type here to search



11:53 PM  
12/15/2017





# Tableau

There are three basic steps involved in creating any Tableau report.

- **Connect to a data source** – It involves locating the data and using an appropriate type of connection to read the data.
- **Choose dimensions and measures** – This involves selecting the required columns from the source data for analysis.
- **Apply visualization technique** – This involves applying required visualization methods, such as a specific chart or graph type to the data being analyzed.



# Tableau

**The Sample Data:** Tableau trial version comes with a sample data base 'Sample – Superstore.xls'. We can access this database at the below location:

\Documents\ Documents\My Tableau  
Repository\Datasources\10.4\en\_US-US\ Sample – Superstore.xls



# Tableau & Excel a Comparison

In excel we summarise the data using pivot table. The similar functionality is provided in tableau in more comfortable manner.

For Example let try to retrieve the category wise product sales from Sample – Superstore database.

- Using Excel
- Using Tableau



# Live and Extract Connection

Tableau provides two types of connections:

## 1. Live Connection

**Data**

Analytics

 Sheet1 (AgentData)

## 2. Extract (A saved subset of a data source)

**Data**

Analytics

 Sheet1 (AgentData)



# Tableau Data Types

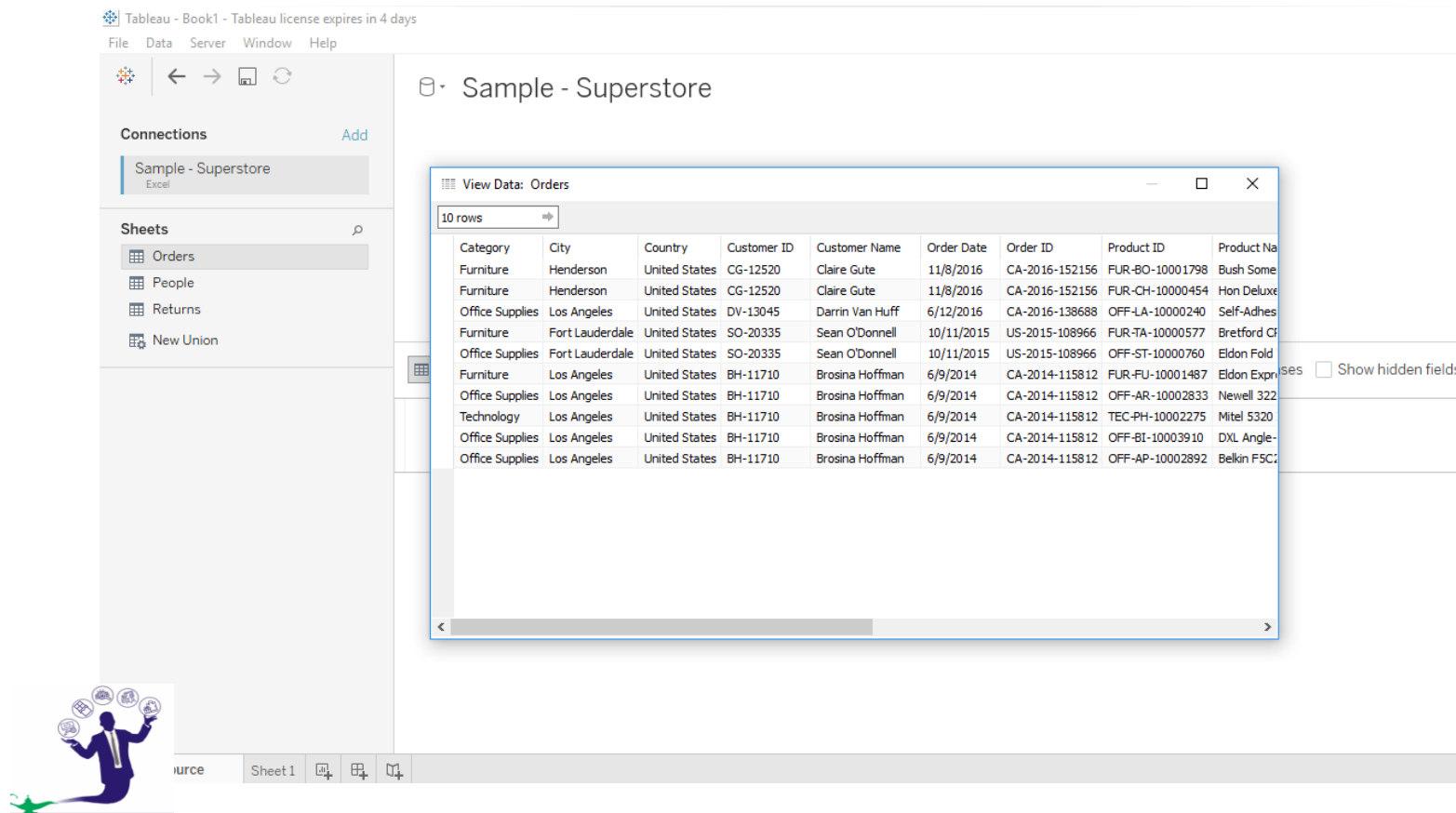
There are 6 data types in Tableau:

1. Number (#)
2. String / Text (ABC)
3. Date ( 📅 )
4. Geographic ( 🌐 )
5. Boolean (True / False)
6. DATE & TIME



# View Data

To view the data source data we need to click on view data button. Alternatively we can drag and drop the sheet in Sheet Area



The screenshot displays the Tableau desktop environment. On the left, the 'Connections' pane shows 'Sample - Superstore' connected to 'Excel'. The 'Sheets' pane lists 'Orders', 'People', 'Returns', and 'New Union'. The main workspace shows a 'Sample - Superstore' view. A 'View Data: Orders' window is open, displaying a table with 10 rows of data. The table columns are: Category, City, Country, Customer ID, Customer Name, Order Date, Order ID, Product ID, and Product Name. The data includes orders from Henderson, Los Angeles, and Fort Lauderdale, with various product categories like Furniture, Office Supplies, and Technology.

Category	City	Country	Customer ID	Customer Name	Order Date	Order ID	Product ID	Product Name
Furniture	Henderson	United States	CG-12520	Claire Gute	11/8/2016	CA-2016-152156	FUR-BO-10001798	Bush Some
Furniture	Henderson	United States	CG-12520	Claire Gute	11/8/2016	CA-2016-152156	FUR-CH-10000454	Hon Deluxe
Office Supplies	Los Angeles	United States	DV-13045	Darrin Van Huff	6/12/2016	CA-2016-138688	OFF-LA-10000240	Self-Adhes
Furniture	Fort Lauderdale	United States	SO-20335	Sean O'Donnell	10/11/2015	US-2015-108966	FUR-TA-10000577	Bretford CF
Office Supplies	Fort Lauderdale	United States	SO-20335	Sean O'Donnell	10/11/2015	US-2015-108966	OFF-ST-10000760	Eldon Fold
Furniture	Los Angeles	United States	BH-11710	Brosina Hoffman	6/9/2014	CA-2014-115812	FUR-FU-10001487	Eldon Expre
Office Supplies	Los Angeles	United States	BH-11710	Brosina Hoffman	6/9/2014	CA-2014-115812	OFF-AR-10002833	Newell 322
Technology	Los Angeles	United States	BH-11710	Brosina Hoffman	6/9/2014	CA-2014-115812	TEC-PH-10002275	Mitel 5320
Office Supplies	Los Angeles	United States	BH-11710	Brosina Hoffman	6/9/2014	CA-2014-115812	OFF-BI-10003910	DXL Angle-
Office Supplies	Los Angeles	United States	BH-11710	Brosina Hoffman	6/9/2014	CA-2014-115812	OFF-AP-10002892	Belkin FSC

# View Data

To view the specific number of records we can specify the number in row count box.

Tableau - Book1 - Tableau license expires in 4 days

File Data Server Window Help

Connections [Add](#)

Sample - Superstore  
Excel

Sheets

- Orders
- People
- Returns
- New Union

Sample - Superstore

View Data: Orders

10 rows

Category	City	Country	Customer ID	Customer Name	Order Date	Order ID	Product ID	Product Name
Furniture	Henderson	United States	CG-12520	Claire Gute	11/8/2016	CA-2016-152156	FUR-BO-10001798	Bush Some
Furniture	Henderson	United States	CG-12520	Claire Gute	11/8/2016	CA-2016-152156	FUR-CH-10000454	Hon Deluxe
Office Supplies	Los Angeles	United States	DV-13045	Darrin Van Huff	6/12/2016	CA-2016-138688	OFF-LA-10000240	Self-Adhes
Furniture	Fort Lauderdale	United States	SO-20335	Sean O'Donnell	10/11/2015	US-2015-108966	FUR-TA-10000577	Bretford CF
Office Supplies	Fort Lauderdale	United States	SO-20335	Sean O'Donnell	10/11/2015	US-2015-108966	OFF-ST-10000760	Eldon Fold
Furniture	Los Angeles	United States	BH-11710	Brosina Hoffman	6/9/2014	CA-2014-115812	FUR-FU-10001487	Eldon Expre
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Office Supplies	Los Angeles	United States	BH-11710	Brosina Hoffman	6/9/2014	CA-2014-115812	OFF-BI-10003910	DXL Angle-
Office Supplies	Los Angeles	United States	BH-11710	Brosina Hoffman	6/9/2014	CA-2014-115812	OFF-AP-10002892	Belkin FSC

☐ Show hidden fields

Data Source Sheet 1



# View Data

To hide a particular column we need to click on the column and select hide.

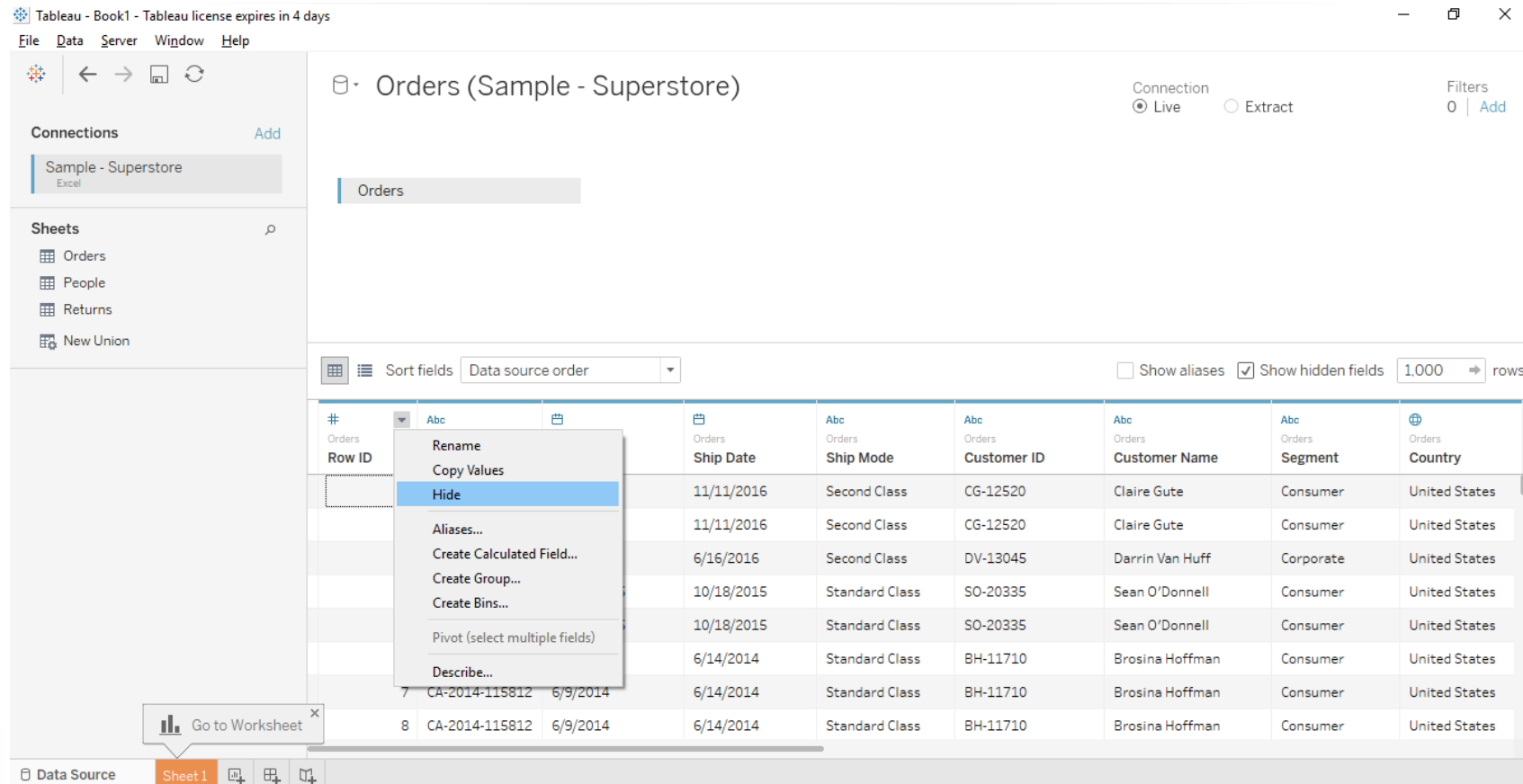


Tableau - Book1 - Tableau license expires in 4 days

File Data Server Window Help

Connections [Add](#)

Sample - Superstore  
Excel

Sheets

Orders  
People  
Returns  
New Union

Orders (Sample - Superstore)

Connection ☒ Live ☐ Extract

Filters 0 [Add](#)

Sort fields Data source order

☐ Show aliases ☒ Show hidden fields 1,000 rows

# Orders Row ID	Abc Ship Date	Abc Ship Mode	Abc Customer ID	Abc Customer Name	Abc Segment	Abc Country		
	11/11/2016	Second Class	CG-12520	Claire Gute	Consumer	United States		
	11/11/2016	Second Class	CG-12520	Claire Gute	Consumer	United States		
	6/16/2016	Second Class	DV-13045	Darrin Van Huff	Corporate	United States		
	10/18/2015	Standard Class	SO-20335	Sean O'Donnell	Consumer	United States		
	10/18/2015	Standard Class	SO-20335	Sean O'Donnell	Consumer	United States		
	6/14/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States		
7	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States
8	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States

Go to Worksheet

Data Source Sheet1





# Column Formatting

Rename – Double Click on the column and edit the name.

Copy – Select the column / Row copy and paste it in Excel

File Data Server Window Help

Connections [Add](#)

Sample - Superstore  
Excel

Sheets

- Orders
- People
- Returns
- New Union

Orders (Sample - Superstore)

Connection ☒ Live ☐ Extract Filters 0 [Add](#)

Sort fields Data source order ☐ Show aliases ☐ Show hidden fields 1,000 rows

#	Orders	Orders	Orders	Orders	Orders	Orders	Orders
Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	Customer Name	
1	CA-2016-152156	11/8/2016	11/11/2016	Second Class	CG-12520	Claire Gute	
2	CA-2016-152156	11/8/2016	11/11/2016	Second Class	CG-12520	Claire Gute	
3	CA-2016-138688	6/12/2016	6/16/2016	Second Class	DV-13045	Darrin Van Huff	
4	US-2015-108966	10/11/2015	10/18/2015	Standard Class	SO-20335	Sean O'Donnell	
5	US-2015-108966	10/11/2015	10/18/2015	Standard Class	SO-20335	Sean O'Donnell	
6	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hoffman	
7	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hoffman	
8	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hoffman	

Consumer United States

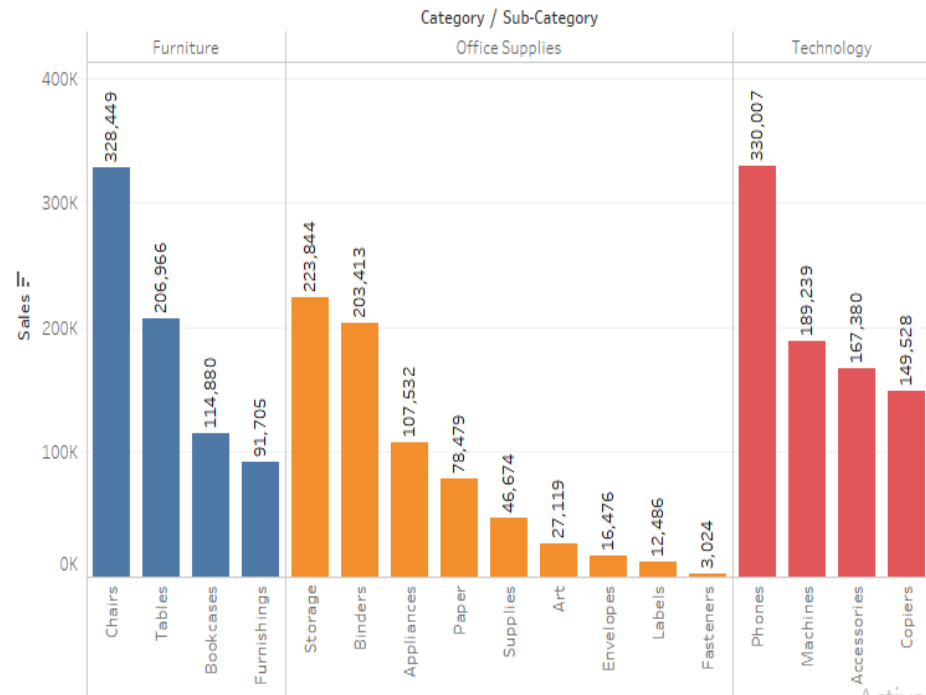
Data Source Sheet 1

# ASSIGNMENT



A-1 create a Graph display category & subcategory wise sales

A-2 Category, Region & Sub-Category wise Profit



Category	Sub-Catego..	Region			
		Central	East	South	West
Furniture	Bookcases	-1,998	-1,168	1,339	-1,647
	Chairs	6,593	9,358	6,612	4,028
	Furnishings	-3,906	5,881	3,443	7,641
	Tables	-3,560	-11,025	-4,623	1,483
Office Supplies	Appliances	-2,639	8,391	4,124	8,261
	Art	1,195	1,900	1,059	2,374
	Binders	-1,044	11,268	3,901	16,097
	Envelopes	1,778	1,812	1,465	1,909
	Fasteners	237	264	174	275
	Labels	1,073	1,129	1,041	2,303
	Paper	6,972	9,015	5,947	12,119
	Storage	1,970	8,389	2,274	8,645
	Supplies	-662	-1,155	2	626
Technology	Accessories	7,252	11,196	7,005	16,485
	Copiers	15,609	17,023	3,659	19,327
	Machines	-1,486	6,929	-1,439	-619
	Phones	12,323	12,315	10,767	9,111

